14: Riggs L-5 (1948) 1965 NO6 Comanche NO6
Oklahoma

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[title page]

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000 ALTERNATE PHONEMIC ANALYSES OF COMANCHE

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0. Introduction
1. Consonants: Analysis A
2. Consonants: Analysis B
3. Discussion
4. Vowels
5. Stress

128 **0.** This paper presents two alternate phonemic analyses of the consonants of Comanche, a Uto-Aztecan language.[1] The 128 question involved is whether the sequence h 194 plus consonant should be regarded as a consonant cluster or as a unit phoneme in 128 this language.[2] In section 3 the relative advantages and disadvantages of each solution will be discussed without any attempt to favor either analysis. The writer, however, prefers analysis B.

128 194 **1. Consonants: Analysis A.** In this analysis the sequence h plus consonant is interpreted as a consonant cluster.

194 **1.1. Stops and spirants** generally occur in unique allophones, namely voiceless; h is assimilated to preceding vowels and following nasals.

Stops: p, t, c (an affricate, patterning as stop), kʷ, k, ʔ. Examples: paa *water*, picipə *milk*, təaʔ *son*, peetə *daughter*, caatə *good*, paciʔ *little sister*, kʷeeniʔ *pointed hill*,

[101] [115] [1] The data on which this paper is based was gathered during the 1948 session of the Summer Institute of Linguistics at the University of Oklahoma. Comanche informants were Molly Weryavah, Emily Riddles, and Mrs. Joe Harry. I am indebted to C. F. Voegelin for suggestions in the presentation of the material.

[2] A third possible analysis, that of interpreting preconsonantal h as a voiceless vowel has not been considered due to the fact that Comanche voiceless vowels are contrastive as to quality, while the phoneme h is not. See section 1.1., Spirants.

194 tənikʷərə *singing*, kooko? *hen*, toko? *grandfather*, ?ara? *uncle*, mo?O *hand*.

Spirants: s, h. Examples: sarii? *dog*, kesautə *wicked*, hiipI *drink*, paha? *aunt*.

1.2. Oral and nasal sonants are voiceless before voiceless vowels, only slightly voiced following h, fully voiced elsewhere.

Oral sonants: w, ʁ, r, y. In intervocalic position, w and y have idiolectal variants gw and dž respectively. The phoneme ʁ is a bilabial fricative; r an alveolar flap. Examples: wa?oo? *cat*, ?awO *cup*, təʁicI *very*, naiʁi? *young lady*, tərə?aitə *working*, karərənə? *I am sitting*, yakeetə *crying*, təhəoyA *pony*.

Nasal sonants: m, n. Examples: mi?arə *going*, kimA *come!*, nə-rəa? *my son*, səsə?anA *sometime*.

1.3. The distribution of the consonants according to analysis A is as follows:

All consonants occur in utterance medial.

The phonemes ʁ and r occur in word initial but not in utterance initial.[3] All other consonants occur in utterance initial.

Only ? and h occur in utterance final.

Consonants occur in the following clusters, which appear only in utterance medial:

h + p, t, c, kʷ, k, w, r, m, n
? + n, r
n + h

2. Consonants: Analysis B. In this analysis the sequence h plus consonant is inter-

[3] The phonemes ʁ and r alternate morphophonemically with p and t respectively. Conditions of alternation are not always phonologically defined. Cf. nə-rəa? *my son*, ?ə-təa? *your son*. In utterance initial position, however, v and r are always replaced by p and t respectively, and r is always replaced by t following i.

[p. 229-B]

194
[128] In this analysis the sequence h plus consonant is interpreted as a unit phoneme, i.e. a preaspirated consonant.

2.1. Consonants which show an opposition of preaspirate versus simple are certain stops and continuants. The stops always appear voiceless; the preaspirate continuants are only slightly voiced, the simple continuants are voiceless before voiceless vowels, voiced elsewhere.

The stops are:

Preasp. 'p, 't, 'c, 'k", 'k

Simple p, t, c, k", k

Examples: ʔa'pəʔ *father*, ka'pe? *bed*, ʔə'tui- *to give (sing.)*, mo'toʔA *pimple*, tune'ci- *to run*, pa'cikeetə *slick*, ya'k"i- *to say*, təɜca-'k"eyaʔi- *to skin*, tə'ka- *to eat*, na'kia *maybe*, paha? *aunt*, tamiʔ *little brother*, caatə *good*, k"iipə *smoke*, kaku? *grandmother*.

The continuants are:

Preasp. 'm, 'w, 'n, 'r

Simple m, w, n, r

Examples: na'meitə *table*, ka'nI *house*, ta'niʔikI- *to put (with plural object)*, woko'wiʔ *squirrel*, puhi'wI *money*, no'rənəpI *bed*, ʔu'ri- *third person obj. dual*, marɔ'a'weʔ *greeting*, waʔooʔ *cat*, narama?ipA *story*, karərə *sitting*.

2.2. Remaining consonants are those consonants in analysis B which do not show opposition of preaspirate versus simple. Their allophones are as described under analysis A.

Stop: ʔ. Examples: miʔarə *going*, ʔaraʔ *uncle*.

Continuants: ʁ, s, y, h. Examples: ʔonaʁiʔ *salt*, muʁipóroʔ *pig*, ʁariiʔ *dog*, sahopA *broth*, yə'k"i- *to say*, təhɜɔyA *pony*, haicI *friend*, pahaʁitə *swimming*.

2.3. The distribution of consonants under analysis B is as follows:

All consonants occur in utterance medial.

All simple (i.e. non-preaspirate) consonants except ʁ and r (as explained in section 1.3.) occur in utterance initial.

Only ʔ and h occur in utterance final.

There are only three consonant clusters.

[p. 230-A]

14: Riggs L-5 (1948) 1965 N06 Comanche N06
Oklahoma

194 Two with glottal stop as prior member (ʔn, ʔr) and nh; these occur in utterance medial.

3. Discussion. Analysis A presents fewer phonemes but more consonant clusters than does analysis B. Yet analysis B, while introducing nine new phonemes, making a total of twenty-three consonants instead of the fourteen afforded under analysis A, presents an interestingly symmetrical system, with oppositions totally lacking under analysis A.

Following analysis A, morpheme boundaries occur between h and a following consonant. This is the case with the form ʔuhri- *third person dual, object out of sight*, where -h- is a dual marker. Under analysis B dual would be marked here by preaspiration. It has been suggested in interpreting other languages that an adequate description is one which permits morpheme boundaries which do not necessarily coincide with phoneme boundaries. An example of this is found in Oaxaca Chontal, where in some instances the third person marker consists of palatalization.[4] Nevertheless, the theoretical advantages and disadvantages remain to be argued.

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194 According to analysis B, one may set up a series of morphophonemic alternations of simple with preaspirate consonants. In adjectives, a simple consonant may be replaced by its corresponding preaspirate in reduplicated forms. cf. paʔatə *long*, paˈpaʔatə *long(redup.)*. In verbs, a preaspirate consonant may be replaced by its corresponding simple consonant in certain formations. cf. t karuʔi-n ʔ *I shall eat* (stem təˈka-), təkənəninəʔ *I was eating* (alternate stem təkə).

194 The phonemic system of Comanche under analysis A seems to correspond more closely
197 to the phonemic systems of the other Uto-Aztecan languages than does the system
197 proferred under analysis B. The phonemes of Proto-Uto-Aztecan apparently had no such double series of consonants as would result from the postulation of a series of preas-

[113] [4] Viola Waterhouse, Learning a Second Language First, IJAL 15.106-109 (1949).

[p. 230-B]

197 pirate consonants, while consonant clusters are not at all rare in the Uto-Aztecan lan-
197 guage family. Comanche preaspirates may
194 correspond to simple consonants in cognate languages. cf. So. Paiute yəŋə, Com. yə'nə? *porcupine*; Tübatulabal tək-, So. Paiute təq.a, Com. tə'ka- *to eat*; So. Paiute qan.i-, Tübatulabal hani, Com. ka'nI *house*; So. Paiute ap.əi-, Com. ?a'pəi- *to sleep (sing.)*; So. Paiute aq.əi-, Com. ?ə'ko?i- *to sleep (pl.)*.

194 4. Vowels. Only one analysis is presented for the vowels; these are voiced and voiceless.

Voiced: i, e, a, o, u, ə. Vowel ə is a high, unrounded vowel varying from central to back position. Vowels i, e, o, u vary from close to open varieties; a varies to [ʌ] in unstressed position. Examples: piapə *big*, tena'pə? *man*, papI *hair*, sonipə *grass*, hununI *creek*, wənə-nə? *I stop*.

Voiceless: I, E, A, O, U, ə. These are of the same quality as their corresponding voiced vowels. In normal speech, utterance medial ə appears somewhat shorter than other voiceless vowels.[5] Examples: ?ekanItə

[5] This fact has given rise to still another interpretation of Comanche phonemes: namely that of considering voiceless, when occurring in medial position, as aspiration of the preceding consonant. See Henry Osborn and William A. Smalley, Formulae for Comanche Stem and Word Formation, IJAL 15.93-99 (1949), where the form təkəbənitu-
[113] ?i-nə? *I will always be eating*, is transcribed [tikʰ-binituʔi-nIʔ]. This interpretation admits of a

[p. 231-A]

194 *red*, hayarokʷEtI *four* (*as used in counting*), sahopA *broth*, ssəmanUrii *ten* (*used as object*), moʔO *hand*, təkəʁənitə-nəʔ *I keep on eating*.

The distribution of the vowels is as follows:

All vowels occur in utterance medial.

Only voiceless vowels and vowel clusters occur in utterance final. When a morpheme with a final single voiced vowel occurs in utterance final position its final vowel is replaced by a voiceless vowel of corresponding quality.

Only voiced vowels occur in clusters. These are of two members, which may consist of identical or diverse vowels. All voiced vowels occur in identical clusters. Examples: tiipE *mouth*, kʷeeʁiʔ *pointed hill*, caatə *good*, kooʁeʔ *face*, huupI *tree*, pəərA *arm* (*wrist to elbow*). The following clusters of diverse vowels have been observed: a, u, e, o followed by i. kasaráiʁoʔ *angel*, pui *eye*, naˈmeitə *table*, kookʷaʔənoi *egg*, i, ɔ, o followed by a. piapə *big*, təasə *again*, moakU *lots*. ɔ, a followed by e. nəetə *wind*, pae *water* (*obj.*).

128 5. In the examples given above stress is unmarked when it falls on the first syllable of a word; in all other cases it is marked.

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few more consonant clusters, but these are much less frequent in occurrence than the type h plus consonant, with which we are concerned.

[p.231-B]